

Climate Change

Climate Justice though Regeneration of Common Property Resources (CPRs) for income and employment generation for the: a case study

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General Note



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An integrated approach has been made to develop a wasteland falling under classes Illes and Vles of land capability classification in watershed management plan, for achieving fuel and fodder security in an adopted village Islamnagar under Operational Research Project on Integrated Energy and Nutrient supply System. An Energy Census and resource Assessment Survey of this village (Maheshwari, et al, 1981) showed that the village was in deficit of fuel wood by 98.8 tons (20.8% shortfall annually) and cattle feed by 812 tons (30% shortfall annually). The total area of the village consists of 717 ha out of which 61.6 ha is forest land, more than half of the forest land comprise of hilly terrain, completely denuded of its trees, however, the silver lining was the fact that the root stock of trees still existed under the soil. Once the physical protection was ensured and a deep cut was given to the roots below the surface of the soil during the summer before the rains, the rootstock sprouted and regenerated very vigorously. In order to meet the fuel wood and fodder demand of the village, 38 ha of land, as identified on the basis of land use planning, was brought under silvi-pastural development with early growing tree species and the high yielding varieties of grasses. The soil and water conservation measures taken include contour survey, cut-off trenches along the contour at 5-10 m vertical interval, vegetative waterways, drainage ditches, cattle protection trenches and kachha service road along the boundary of the area, temporary erosion control structures and micro-catchment water harvesting for insitu water conservation. In addition to meeting fuel wood and fodder demand and other intangible benefits, like artisanal raw materials, the silvi-pastural development of identified wasteland generated 1,15,421 man-days of work during a five year period. In other words, 60 persons could be employed year round for this work alone. In terms of harnessing solar energy through photosynthetic processes in the form of food, fuel, fiber and fodder amounts to 21 percent annually as against 2-4 percent for field crops. In terms of income generation, the annual auction of natural grasses alone in the fifth year amounted to Rs 6000 per ha. There was perceptible drop in the ambient temperatures in the summer, with increased number of birds and wildlife, including a pair of wolves.